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09/872,011	06/04/2001	Yoko Saito	500.36158CX1	3649

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EXAMINER
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LEE, CHI CHUNG

ART UNIT	PAPER NUMBER
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2131

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DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/872,011

Applicant(s)

SAITO ET AL.

Examiner

Chi-Chung E Lee

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claim 17 is objected to because of the following informalities: On page 3 line 3 of the preliminary amendment, there is a typographic error. The words “aid ciphered code” should be “said ciphered code”. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16 –19 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi et al (US 5,109,152 A).

As per claim 16, Takagi discloses a method for perform authentication communication between a first communication device 10 and a second communication device 20, comprising the steps of:

a) generating, by said client (i.e. the first communication device 10, see figure 1), a random number data, ciphering said random number by using a first encryption key KE1, and transmitting said random number to service server (i.e. the second communication terminal device 20, see column 5 lines 20-25);

Art Unit: 2131

b) deciphering said ciphered random number by using a first decryption key KD1 in the service server (i.e. the second communication terminal device 20, see column 38-41), re-ciphering said random number using the second encryption key KE2 and transmit said re-ciphered random number to said client (i.e. the first communication device 10, see column 5 lines 41-45);

c) re-deciphering said re-ciphered random number using the second decryption key KD2 by said client (i.e. first communication device 10, see column 6 lines 1-5), comparing the random number generated in the client with the random number received from the service client and sending an inquiry about start of a service (i.e. granting the first processing means 17 to have the information exchange with the service server (i.e. second terminal device 20, see column 6 lines 6-12).

As per claim 17, Takagi discloses the service server (i.e. second terminal device 20)

a) not only re-ciphering said random number using the second encryption key KE2 but also ciphers a code (i.e. the transmission data) and transmits said re-ciphering random number and said ciphered code to client (i.e. the first communication device, see column 6 lines 25-29); and

b) not only re-deciphers said re-ciphered random number but also deciphers said ciphered code (i.e. entered ciphered transmission data, see column 6 lines 29-34), comparing the random number generated in the client with the random number received from the service client and said ciphered code; sending an inquiry about start of a service (i.e. granting the

Art Unit: 2131

first processing means 17 to have the information exchange with the service server (i.e. second terminal device 20, see column 6 lines 35-45).

As per claim 18, Takagi discloses a computer program for use in performing the authentication between a client (i.e. a first communication device 10) and a service server (i.e. a second communication device 20), comprising the steps of:

- a) generating, by said client (i.e. the first communication device 10, see figure 1), a random number data, ciphering said random number by using a first encryption key KE1, and transmitting said random number to service server (i.e. the second communication terminal device 20, see column 5 lines 20-25);
- b) deciphering said ciphered random number by using a first decryption key KD1 in the service server (i.e. the second communication terminal device 20, see column 38-41), re-ciphering said random number using the second encryption key KE2 and transmit said re-ciphered random number to said client (i.e. the first communication device 10, see column 5 lines 41-45);
- c) re-deciphering said re-ciphered random number using the second decryption key KD2 by said client (i.e. first communication device 10, see column 6 lines 1-5), comparing the random number generated in the client with the random number received from the service client and sending an inquiry about start of a service (i.e. granting the first processing means 17 to have the information exchange with the service server (i.e. second terminal device 20, see column 6 lines 6-12)).

Art Unit: 2131

As per claim 19, the claimed functions of the elements of the apparatus corresponds to the method step of claim 16, which has been rejected above, and thus rejected with the same reason applied thereto.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Leith et al (US 5,196,840 A)

As per claim 20, Leith discloses a method for performing authentication between a first computer (i.e. host computer 32) and a second computer (i.e. remote computer) connected over a network 36 [see figure 2] comprising the steps of:

- a) transmitting, by the remote computer, a service request to the host computer, a certificates (i.e. user ID) being attached to said service request [see column 5 lines 45-55];
- b) generating a ciphering key (i.e. PIN) according to the result of confirmation of said ID;
- c) generating, by the first computer (i.e. host computer), a random number data, ciphering said random number by using a first encryption key (i.e. PIN), and transmitting said

Art Unit: 2131

random number to the second computer (i.e. the remote computer 38, see column 5 lines 63-66);

d) deciphering said ciphered random number by using a first decryption key (i.e. PIN) in the second computer (i.e. the remote computer 38); re-ciphering said random number using the encryption key RN and said ciphered code (i.e. PIN); transmit said re-ciphered random number and ciphered code (i.e. PIN) to said the first computer (i.e. host computer, see column 6 lines 7-17);

e) re-deciphering said re-ciphered random number using the decryption key RN by said first computer (i.e. host computer, see column 6 lines 17-20) and deciphering said ciphered code (i.e. PIN); comparing the random number generated in the host computer with the random number received from the remote computer [see column 6 lines 27-31] and sending an inquiry about start of a service.

As per claim 21, Leith discloses the ciphering key RN (i.e. the session key) is valid only for the remainder of the session [see column 31-37].

As per claim 22, Leith discloses the said code (i.e. user PIN) indicating said second computer is a name of said second computer (i.e. the remote computer, see figure 3 and column 5 lines 45-50).

Claim 23 is similar to the claim 20, which has been rejected above, and thus rejected with the same reason applied thereto.

Art Unit: 2131

As per claim 24, the claimed functions of the elements of the apparatus corresponds to the method step of claim 20, which has been rejected above, and thus rejected with the same reason applied thereto.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chi-Chung E Lee whose telephone number is 703-306-4153.

The examiner can normally be reached on 8 am - 5 pm, Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Chi-Chung Lee  
11/15/03



AYAZ SHEIKH  
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